IN THE CLAIMS:

Claims 1, 3, 4, 7, 8, 13, 15, 16, 19 and 20 have been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently amended) A client based method, comprising: obtaining a hint;

obtaining a password;

performing a hashing algorithm on the hint and the password to generate a key;

encrypting data using the key; and

sending the encrypted data to a server for storage; and

sending the hint to a client.

2. (Original) The method of claim 1, wherein the step of performing a hashing algorithm includes hashing the password.

3. (Currently amended) The method of claim 1, A method, comprising:

obtaining a hint;

obtaining a password;

performing a hashing algorithm on the hint and the password to generate a key, wherein the step of performing a hashing algorithm includes hashing the password to derive a first secret, hashing the first secret to derive a second secret, hashing the hint and the first secret to generate an intermediate index, and hashing the intermediate index and the second secret to generate the key;

encrypting data using the key; and

sending the encrypted data to a server for storage.

Appl. No.: 09/378,226

Filed: 08/19/1999

(Currently amended) A elient system, comprising:
 a user interface for obtaining a password;

a key generator coupled to the user interface for performing a hashing algorithm on a hint and the password to generate a key;

an encryption engine coupled to the key generator for encrypting data using the key; and a communications module coupled to the engine for sending the encrypted data and the hint to a server for storage.

- 5. (Original) The system of claim 4, further comprising a hint generator for generating the hint.
- 6. (Original) The system of claim 4, wherein the key generator hashes the password.
- 7. (Currently amended) The system of claim 4, A system, comprising:

 a user interface for obtaining a password;

a key generator coupled to the user interface for performing a hashing algorithm on a hint and the password to generate a key wherein the key generator hashes the password to derive a first secret, hashes the first secret to derive a second secret, hashes the hint and the first secret to generate an intermediate index, and hashes the intermediate index and the second secret to generate the key;

an encryption engine coupled to the key generator for encrypting data using the key; and a communications module coupled to the engine for sending the encrypted data to a server for storage.

8. (Currently amended) A elient system, comprising:

means for obtaining a hint;

means for obtaining a password;

means for performing a hashing algorithm on the hint and the password to generate a key;

means for encrypting data using the key; and

means for sending the encrypted data to a server for storage; and

means for sending the hint to a client.

- 9. (Original) The system of claim 8, wherein the system includes code stored on a computer-readable storage medium.
- 10. (Original) The system of claim 8, wherein the system includes code embodied in a carrier wave.

11. (Original) A method, comprising:

receiving a request to store encrypted data from a client;

sending an encryption downloadable for deriving a key to encrypt data to the client;

receiving encrypted data that was encrypted by the encryption downloadable from the client; and

obtaining a hint, corresponding to the encrypted data and needed for regenerating the key; and

storing the hint and the encrypted data.

12. (Original) A system, comprising:

an encryption downloadable for deriving an encryption key from a password and a hint;

a web server for interfacing with a client, for sending the encryption downloadable to the client, and for receiving encrypted data that was encrypted by the encryption downloadable from the client; and

memory coupled to the web server for storing a hint corresponding to the encrypted data and needed to regenerate the key from the client and the encrypted data.

13. (Currently amended) A client-based method, comprising:

obtaining a password;

receiving sending encrypted data and a hint corresponding to the encrypted data from a server to a client; and

performing a hashing algorithm on the password and the hint <u>at the client</u> to generate a key for decrypting the encrypted data.

- 14. (Original) The method of claim 13, wherein the step of performing a hashing algorithm includes hashing the password.
- 15. (Currently amended) A elient system, comprising: a user interface for obtaining a password;

a communications module for receiving the sending encrypted data and a hint corresponding to the encrypted data from a server to a client; and

a key generator for performing a hashing algorithm on the password and the hint <u>at the client</u> to generate a key for decrypting the encrypted data.

16. (Currently amended) A elient system, comprising: means for obtaining a password;

means for receiving sending encrypted data and a hint corresponding to the encrypted data from a server to a client; and

means for performing a hashing algorithm on the password and the hint <u>at the client</u> to generate a key for decrypting the encrypted data.

- 17. (Original) The system of claim 16, wherein the system includes code stored on a computer-readable storage medium.
- 18. (Original) The system of claim 16, wherein the system includes code embodied in a carrier wave.
- 19. (Currently amended) A method, comprising: receiving identification of encrypted data;

sending a decryption downloadable for deriving a key from a password and a hint to a client; and

sending a hint corresponding to the encrypted data to the client; and deriving the key by hashing at least one of the hint and the password.

20. (Currently amended) A system, comprising:

a decryption downloadable for deriving a key from by hashing at least one of a password and a hint;

encrypted data;

a hint corresponding to the encrypted data; and

a web server for interfacing with a client, and for sending the decryption downloadable, the encrypted data and the hint to the client.

21. (Original) A client-based method, comprising:

obtaining a password;

deriving a first secret from the password;

receiving a hint corresponding to data to be decrypted from a server;

deriving an intermediate index from the first secret and the hint; and

sending the intermediate index to the server.

22. (Original) The method of claim 21, wherein deriving the first secret includes hashing the password.

23. (Original) The method of claim 21, wherein deriving an intermediate index includes hashing the first secret and the hint.

24. (Original) A system, comprising:

a user interface for obtaining a password;

an index generator coupled to the user interface for generating an intermediate index from a hint received from a server and a secret derived from the password; and

a communications engine coupled to the index generator for sending the intermediate index to the server.

Appl. No.: 09/378,226

Filed: 08/19/1999

- 25. (Original) The system of claim 24, wherein the index generator generate the intermediate index by hashing the hint and the secret.
- 26. (Original) A system, comprising: means for obtaining a password; means for deriving a first secret from the password; means for receiving a hint corresponding to data to be decrypted from a server; means for deriving an intermediate index from the first secret and the hint; and means for sending the intermediate index to the server.
- 27. (Original) The system of claim 26, wherein the system includes code stored on a computer-readable storage medium.
- 28. (Original) The system of claim 26, wherein the system includes code embodied in a carrier wave.
- 29. (Original) A server-based method, comprising:receiving an indication of encrypted data to be decrypted;

transmitting to a client a hint corresponding to the indication, and a decryption downloadable for deriving an intermediate index from a password and the hint;

receiving the intermediate index from the client; and

deriving a decryption key from a second secret corresponding to the user and the intermediate index.

30. (Original) A system, comprising:

a second secret corresponding to a user;

a decryption downloadable for generating an intermediate index from a password and a hint;

a web server for receiving an indication of encrypted data to be decrypted, for transmitting the decryption downloadable and a hint corresponding to the indication to a client, and for receiving an intermediate index from thee client; and

a server-resident module for deriving a key for decrypting the encrypted data from the second secret and the intermediate index.